BUS BOOKING SYSTEM
(BBS)

SITI NOR ATIQAH BINTI MAT ZIN

Bachelor of Computer Science (Computer Systems & Networking) with Honors

UNIVERSITI MALAYSIA PAHANG

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I/We* hereby declare that I/We* have checked this thesis/project* and in my/our* opinion, this thesis/project* is adequate in terms of scope and quality for the award of the degree of *Doctor of Philosophy/ Master of Engineering/ Master of Science in ……..

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I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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Date : 3 May 2018

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Thesis submitted in fulfillment of the requirements
for the award of the degree of
Bachelor of Computer Science (Computer Systems & Networking) with Honors

Faculty of Computer Systems & Software Engineering

UNIVERSITI MALAYSIA PAHANG

MAY 2018

ACKNOWLEDGEMENTS

I would like to say a lot of thank you to my supervisor, Dr. Zuriani Binti Mustaffa for her guidance and advice given to me in order to help me finishing this final year project. Without her help, I will unable to see clearly what exactly this project is all about.

Also, a very huge thanks to everyone that keep on supporting me to complete this project especially my parents, family, lecturers, and friends that never stop help me gaining my spirit to stay strong when I am depressed.

Thank you for all endlessly support that you guys have given to me from the beginning until the end of this project completion. I really appreciate it. Thank you.

ABSTRAK

Sistem Tempahan Bas (BBS) adalah aplikasi berasaskan web yang dibangunkan untuk memperbaiki sistem yang sedia ada yang digunakan oleh penumpang bas untuk menempah bas. Perkembangan sistem ini adalah untuk membantu penumpang bas menempah bas dalam talian dan juga membantu pentadbir menyimpan maklumat tempahan dalam pangkalan data. Sistem yang dicadangkan membantu mengatasi masalah tempahan bas manual yang menyusahkan dan memerlukan lebih banyak masa dan tenaga. Projek ini memberi tumpuan kepada penumpang bas di UMP Gambang yang meliputi pelajar dari pelbagai fakulti, kursus, tahun pengajian dan destinasi mereka. Sistem ini ditulis menggunakan bahasa pengaturcaraan HTML, CSS, PHP dan JavaScript. Pembangunan aplikasi pesat (RAD) adalah metodologi yang digunakan dalam pembangunan aplikasi ini. RAD terdiri daripada empat fasa perancangan keperluan, reka bentuk pengguna, pembinaan, dan pemotongan / peralihan. Semua fasa ini adalah garis panduan dalam membangunkan sistem ini. Selepas pembangunan sistem, pengguna akan diberikan ujian penerimaan pengguna (UAT) untuk memastikan setiap fungsi dalam sistem ini berfungsi dengan baik. Kelebihan sistem ini ialah BBS menggantikan versi tempahan bas buku sebelumnya dengan membolehkan pengguna membuat tempahan bas dalam talian yang boleh dibuat di mana sahaja dan bila-bila masa. Dengan menggunakan BBS, pengurusan proses tempahan akan lebih teratur kerana semua maklumat dan data akan dimasukkan ke dalam sistem dan disimpan dalam pangkalan data. Akhir sekali, galakan interaksi manusia-komputer. Daripada interaksi manusia ke manusia, tempahan dalam talian (BBS) akan menggalakkan pengguna berinteraksi dengan komputer.

ABSTRACT

The Bus Booking System (BBS) is a web-based application that is developed to improve the existing systems which is used by bus passengers to book the bus. The development of this system is to help bus passengers to book the bus online and also help the administrator to store the booking information in the database. The proposed system helps to overcome the problems of manual bus booking that are inconvenient and required more time and energy. This project focuses on bus passengers at UMP Gambang which covers students from different faculty, course, year of study and their destinations.This system is written using HTML, CSS, PHP and JavaScript programming language. Rapid application development (RAD) is a methodology used in development of this application. The RAD consists of four phases of requirements planning, user design, construction, and cutover/transition. All these phases are guidelines in developing this system. After development of the system, user will be given user acceptance test (UAT) to ensure every functions in this system work properly. The advantages of this system is that BBS replaced the previous version of manual bus booking by enabling users to make online bus booking that can be made anywhere and anytime. By using BBS, the management of the booking process will be more organised as all the information and data will be inserted into the system and stored in the database. Last but not least, encouragement of human-computer interaction. Rather than human-to-human interaction, the online booking (BBS) will encourage users to interact with computers.

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

BBS	Bus Booking System
RAD	Rapid Application Development
SAffAD	Student Affairs & Alumni Department
UMP	Universiti Malaysia Pahang

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Basically, Universiti Malaysia Pahang (UMP) bus service is important for UMP students who need to conduct any activities regarding academic or non-academic outside the campus areas. Definitely, there consists a lot of benefits to use UMP bus service includes the price of the bus booking is much cheaper than outside buses. Besides, save time from having to make a survey of the most affordable and comfortable buses outside the campus. Furthermore, using the UMP bus service is more safe because it is trustable rather than having to deal with people outside that you do not even know their background.

Considering that matter, bus booking system is introduced. The best version of bus booking is through a well-developed system rather than manually booking. UMP bus service is one of the services that needed to use the booking system. Student tend to book the UMP bus whenever they have any activities or programs that required them to be outside of the campus. Furthermore, UMP bus is meant for UMP students whether for academic or co-curriculum. However, currently the students need to manually book the bus by fill in the booking form, send it to the person in charge for the bus booking management, and waiting for the approval which are required a lot of work to do and inefficient. This method of booking is barely efficient as the booking status might not be known by the students whether it is already accepted or otherwise. Other than that, staff has to save all the booking information and documents manually which require time and effort. Concerning these matters, this project proposes a Web-Based Bus Booking System. The system enable students to do the online booking. Students no longer have to waste their time going to the UMP bus booking department to book the bus. Every

students that want to book the bus should consider to use this website to make sure they do a smart choice, journey plan, promote ease of operation, and save their time. This website will be convenient to be used by people which have the access to any types of devices. Utilizing this website, students can remain in peace, ease, avoiding delays instead of having to book the bus and wait for the booking confirmation manually.

1.2 Problem Statement

The problems that occur with the current method of booking is that firstly, students have to make a booking manually. At first, students have to download the form and fill in all the information needed. Then they need to submit the form to the SAffAD to get the approval. This kind of method is totally inefficient and waste time when it can be done online and anywhere as long as you have devices and internet access. For those that always busy and on-the-go person, they might not have the time to go to the SAffAD. And for those that do not have transportation, it is quite tiresome having to walk to the SAffAD.

Secondly, SAffAD staff has to store the booking information manually. In order to keep the booking information, staff has to keep all the booking documents or save the booking information in the computer manually. This will require effort and time.

Lastly, students are unable to check the availability of the bus. Basically, students do not have the ability to check the availability of the bus whether it is full booked or otherwise. The bus availability status remains unknown until further notice from SAffAD.

Concerning these matters, this project proposed a BBS which addresses the stated issues. The highlighted issues is summarized in Table 1.1.

Table 1.1 : Summary of Problem Statement

NO	PROBLEM	DESCRIPTION	EFFECT
1	Students have to make a booking manually.	First, students have to download the form and fill in all the information needed. Then they need to submit the form to the SAffAD.	Inefficient and waste time when it can be done online.
2	SAffAD staff has to store the booking information manually.	In order to keep the booking information, staff has to keep all the booking documents or save the booking information in the computer manually.	Require effort and time.
3	Students are unable to check the availability of the bus.	Basically, students do not have the ability to check the availability of the bus whether it is available or not.	The bus availability status remains unknown until further notice from SAffAD.

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